

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method for operating a computer using object-based computer code of an object-oriented programming language, the method comprising:

utilizing an explicit interface member mechanism that enables a class software component to implement an at least one explicit interface member by explicitly specifying the relationship between ~~said the class software component~~ and the explicit interface member, wherein the explicit interface member mechanism enables an implemented explicit interface member to be excluded from a public interface of said class; and

storing said ~~class software component~~ in a form that includes said implemented explicit interface member in a computer readable storage medium.

2. (Currently amended) A method according to claim 1, wherein said specifying of the relationship includes specifying a qualified name of the class software component.

3. (Currently amended) A method according to claim 2, wherein said specifying of the qualified name includes specifying an interface name and said at least one interface member name.

4. (Canceled)

5. (Canceled)

6. (Currently amended) A method according to claim 1, wherein the explicit interface member mechanism enables ~~said the class software component~~ to implement an internal interface not accessible to a consumer of said class software component.

7. (Original) A method according to claim 1, wherein said explicit interface member mechanism enables disambiguation of a plurality of interface members having the same signature.

8. (Original) A method according to claim 1, wherein said explicit member mechanism enables disambiguation of a plurality of interface members having the same signature and return type.

9. (Original) A method according to claim 1, wherein in addition to allowing the implementation of public interface members, said explicit interface member mechanism enables the implementation of private interface members.

10. (Original) A method according to claim 1, wherein said explicit interface member mechanism enables the implementation of a plurality of non-conflicting specific versions of a generic interface.

11. (Original) A method according to claim 1, wherein the computer code is programmed according to an object-oriented programming language, and said object-oriented programming language is one of C#, Fortran, Pascal, Visual Basic, C, C++ and Java.

12. (Original) A method according to claim 1, wherein an implementation of an explicit interface member is a method, property, event, or indexer declaration that references a fully qualified interface member name.

13. (Currently amended) A method according to claim 1, wherein the class ~~software component~~ names an interface in a base class list of the class ~~software component~~ that contains a member whose fully qualified name, type, and parameter types exactly match those of the implementation of the explicit interface member.

14. (Currently amended) A method according to claim 1, wherein said explicit interface member mechanism includes an interface mapping mechanism that locates implementations of interface members in the class ~~software component~~.

15. (Currently amended) A method according to claim 14, wherein said interface mapping mechanism locates an implementation for each member of each interface specified in a base class list of the class ~~software component~~.

16. (Canceled)

17. (Original) A method according to claim 1, wherein it is not possible to override an explicit interface member implementation, but where an explicit interface member implementation calls another virtual method, derived classes are capable of overriding the implementation.

18. (Currently amended) A method according to claim 1, wherein the class ~~a software component of said software component that~~ inherits an interface implementation is permitted to re-implement the interface by including the interface in the base class list of the software component.

19. (Original) A method according to claim 1, wherein said explicit interface member mechanism prevents conflict among specific implementations of a generic interface.

20-22. (Canceled)

23. (Currently amended) A computer readable storage medium having stored thereon a plurality of computer-executable modules written in an object-oriented programming language, the computer executable modules comprising:

an explicit interface member mechanism that enables a class ~~the software component~~ to implement an explicit interface member by explicitly specifying the relationship between said the class software component and the an interface member, wherein said explicit interface member mechanism enables an implemented explicit interface member to be excluded from a public interface of said class.

24. (Previously presented) A computer readable storage medium according to claim 23, wherein said specifying of the relationship includes specifying a qualified name of the at least one software component.

25. (Previously presented) A computer readable storage medium according to claim 24, wherein said specifying of the qualified name includes specifying at least one interface name and said at least one interface member name.

26. (Currently amended) A computer readable storage medium according to claim 23, wherein said explicit interface member mechanism enables an explicit interface member implementation to be excluded from the public interface of said class software component.

27. (Canceled)

28. (Currently amended) A computer readable storage medium according to claim 23, wherein the explicit interface member mechanism enables ~~said the~~ class software component to implement an internal interface not accessible to a consumer of said class software component.

29. (Previously presented) A computer readable storage medium according to claim 23, wherein said explicit interface member mechanism enables disambiguation of a plurality of interface members having the same signature.

30. (Previously presented) A computer readable storage medium according to claim 23, wherein said explicit member mechanism enables disambiguation of a plurality of interface members having the same signature and return type.

31. (Previously presented) A computer readable storage medium according to claim 23, wherein in addition to allowing the implementation of public interface members, said explicit interface member mechanism enables the implementation of private interface members.

32. (Previously presented) A computer readable storage medium according to claim 23, wherein said explicit interface member mechanism enables the implementation of a plurality of non-conflicting specific versions of a generic interface.

33. (Previously presented) A computer readable storage medium according to claim 23, wherein the object-oriented programming language is one of C#, Fortran, Pascal, Visual Basic, C, C++ and Java.

34. (Previously presented) A computer readable storage medium according to claim 23, wherein an implementation of an explicit interface member is a method, property, event, or indexer declaration that references a fully qualified interface member name.

35. (Currently amended) A computer readable storage medium according to claim 23, wherein said the class ~~software component~~ names an interface in the base class list of the class ~~software component~~ that contains a member whose fully qualified name, type, and parameter types exactly match those of the implementation of the explicit interface member.

36. (Currently amended) A computer readable storage medium according to claim 23, wherein said explicit interface member mechanism includes an interface mapping mechanism that locates implementations of interface members in said class ~~software component~~.

37. (Currently amended) A computer readable storage medium according to claim 36, wherein said interface mapping mechanism locates an implementation for each member of each interface specified in a base class list of the class ~~software component~~.

38. (Canceled)

39. (Previously presented) A computer readable storage medium according to claim 23, wherein it is not possible to override an explicit interface member implementation, but where an explicit interface member implementation calls another virtual method, derived classes are enabled to override the implementation.

40. (Currently amended) A computer readable storage medium according to claim 23, wherein the class ~~a software component of said at least one software component~~ ~~that~~ inherits an interface implementation is permitted to re-implement the interface by including it in a base class list of the class ~~a software component~~.

41. (Previously presented) A computer readable storage medium according to claim 23, wherein said explicit interface member mechanism prevents conflict among specific implementations of a generic interface.

42.-57. (Canceled)

58. (Previously presented) The method of claim 61, wherein it is not possible to override an explicit interface member implementation, but where an explicit interface member implementation calls another virtual method, derived classes are enabled to override the implementation.

59. (Currently amended) The method of claim 61, wherein ~~a software component~~ of said class software component ~~that~~ inherits an interface implementation is permitted to re-implement the interface by including it in the base class list of the class software component.

60. (Previously presented) The method of claim 61, wherein said implementing said explicit interface member prevents conflict among specific implementations of a generic interface.

61. (Currently amended) A method of generating an object comprising:
receiving, by a compiler, source code identifying a class that implements an interface and a member, the class specifying a relationship between the member and the name of the interface;

implementing, by the compiler, the member as an explicit interface member in the class in response to detecting the relationship between the member and the name of the interface, wherein the explicit interface member is excluded from a public interface of the class and the explicit interface member is accessible from the interface ~~a software component~~
~~by specifying a relationship between said software component and an interface member;~~ and
initializing an instance of said class software component in a computer readable storage medium.

62. (Currently amended) The method of claim 61, wherein said specifying a relationship includes specifying a qualified name of the class software component.

63. (Previously presented) The method of claim 62, wherein said specifying a qualified name includes specifying an interface name and said interface member name.

64. (Canceled)

65. (Canceled)

66. (Currently amended) The method of claim 61, wherein said class software component implements an internal interface that is not accessible to a consumer of said software component.

67. (Previously presented) The method of claim 61 wherein said implemented explicit interface member enables disambiguation of interface members with the same signature.

68. (Previously presented) The method of claim 61 wherein said implemented explicit interface member enables disambiguation of interface members with the same signature and return type.

69. (Previously presented) The method of claim 61 wherein said implemented explicit interface member enables the implementation of private interface members.

70. (Previously presented) The method of claim 61, wherein said implemented explicit interface member enables a plurality of non-conflicting specific versions of a generic interface.

71. (Previously presented) The method of claim 61, wherein the explicit interface member is implemented in an object-oriented programming language.

72. (Previously presented) The method of claim 61, wherein said implemented explicit interface member is a member selected from a group of members consisting of a method, a property, an event, and an indexer declaration that references a fully qualified interface member name.

73. (Currently amended) The method of claim 61, wherein said class software component names an interface in a base class list of the class software component that contains a member whose fully qualified name, type, and parameter types exactly match those of the implemented explicit interface member.

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74. (Currently amended) The method of claim [[54]] 61 further comprising:
locating implemented interface members in each interface in said class software
~~component~~.

75. (Previously presented) The method of claim 66, wherein said locating
implementations of each interface member includes locating an implementation for each
member of each interface specified in a base class list of the software component.

76. (Canceled)